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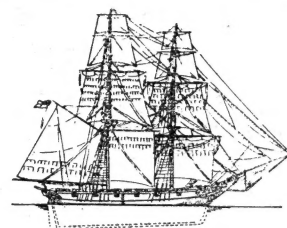
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Model Ships and Power Boats

INCORPORATING *Ships and Ship Models*

EDITED BY EDWARD BOWNESS

VOL IV NO 39

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The Ship's Log

Following the purchase of the model of the Clipper Ship, *Thermopylae*, as noted in our December issue, the National Maritime Museum has now acquired a model of her great rival, the *Cutty Sark*. The model was originally offered to the Duke of Edinburgh, by Mr. James Culhane, vice-president of the Buckingham Corporation of New York. The Duke of Edinburgh suggested that the model might be a suitable exhibit for the National Maritime Museum, of which he is a trustee. Mr. Culhane agreed and presented the model to the Museum.

The model makes a very interesting comparison with that of the *Thermopylae*. The *Thermopylae* model is the work of an expert craftsman and modelmaker, whereas the later model was made by a Scandinavian sailor, Mr. Thomas Rosenkvist, who had actually served in the ship. When he left the sea his love for the old ship prompted him to obtain scale drawings and to make a model of her. The model shows her under all plain sail to the main skysail and gaff topsail. The hull and deck details are well carried out and the model as a whole is a good example of a sailor-made model. The scale is approximately six feet to the inch as compared with the eight feet to the inch scale of the *Thermopylae* model. The photograph on page 18 will give our readers some idea of the amount of detail incorporated in the model.

The east wing of the Museum is now being prepared for the display of models and paintings of ships of from about 1820 onwards. The transition from sail to steam for both the Royal Navy and the

Merchant Navy is well covered and the display should prove most interesting. The two clipper models will occupy an honoured position in the display, which will be open to the public in time for the Festival of Britain.

OUR COVER PICTURE

Some of our readers may have already seen the model in our cover picture and those who have television sets will be certain to have seen the individual launching the model, even though they don't recognise him from the picture. He is none other than Mr. Vincent Harris, who is giving a series of demonstrations on television of "How To Build Yourself a Model Yacht." Very naturally, Mr. Harris came to our office for plans for his model, and fortunately we had just received the plans for the new Daniels and Tucker book on this subject. The sharpie design in that book seemed to Mr. Harris just what he wanted, so he went ahead and built the model. In the picture he is seen launching it for its first trial trip, in which we understand it did credit to both the designer and the builder. The television demonstrations have created a keen interest, and a large number of models are being built. As the design is thoroughly sound, being the joint product of two of our leading designers, it will give a good account of itself. As the young builders grow older no doubt a fair proportion of them will build bigger yachts and help to swell the ranks of the more serious model yachtsmen. Photograph by L. C. Mason, Winchmore Hill, London, N.21.

*MODEL POWER BOAT TOPICS

By Edgar T. Westbury

MANY readers have written to me asking for advice on how to construct engines with very simple equipment. One of the problems of present-day living conditions is that of obtaining any housing accommodation whatever, much less of obtaining the sort of accommodation we would like, and the result is that a very large proportion of enthusiasts who have a keen urge to create and build models are lacking either the facilities or the means for a properly equipped workshop. Moreover, they have very little prospect of improving on this state of affairs for several years to come.

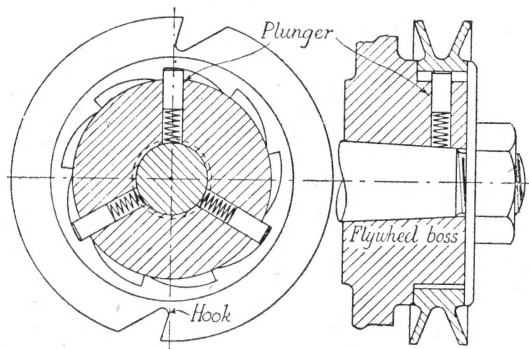
It is certainly a great handicap for such potential

well, when the time comes for him to embark on more ambitious schemes.

ENGINES WITHOUT A LATHE

When one comes to consider the construction of mechanical models, and engines in particular, the question of equipment becomes much more important, and it is no mean feat to construct a really successful working engine of any kind without the use of a lathe. There are, however, many model engineers who have done this quite successfully, and I have seen some really remarkable models of this type. The ability to carry out work of this nature, however, is, I believe, something of a natural gift, and it requires quite abnormal mental resources in addition to manual skill. In some cases, the constructors of such models have an uncanny gift for selecting and also acquiring suitable finished or semi-finished material which can be worked into the construction of their models, and in at least one case that I know, a constructor just simply worked on the principle of making a definite search for suitable material for each component as the need for it arose. His models took him a very long time to make in consequence, but they were monuments of patience when finished.

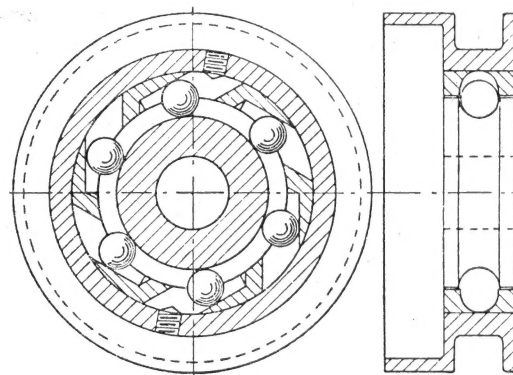
I very much doubt whether anyone could learn to do work of this kind by reading books or articles, any more than he could learn to swim or ride a bicycle



A simple plunger type ratchet starter pulley

model engineers to be deprived of the means of expressing their ideas in a concrete form, and I have every sympathy with their difficulties, but many of them are in error in supposing that this is quite a new problem. As a matter of fact, I should imagine that the great majority of model engineers have had to face such a problem in the early days of their career. It is certainly true in my own case. I may, perhaps, be accused of being brutal or cynical, but I really believe that the man who waits for all the conditions to be favourable before he starts making models, will never become a successful model engineer.

There are certain types of models which can be made with simple tools and without the use of a properly fitted workshop. It maybe, of course, that these are not the particular kind of models that my querists wish to make, but it is much better to make a start on models which are within one's equipment and facilities than to do nothing at all. As a matter of fact, the training in craftsmanship which can be obtained from making models of this type is invaluable, and will serve the model maker



A "silent" ball ratchet using steel balls working in tangential slots

by similar methods. This is one of the many cases where the craftsman is thrown entirely on his own resources, and no one else can give him very much assistance. Incidentally, I may add that whenever I see a remarkable mechanical model which has been made with little or no equipment, I cannot help wondering just how much better a job the

**Continued from February issue, page 233.*

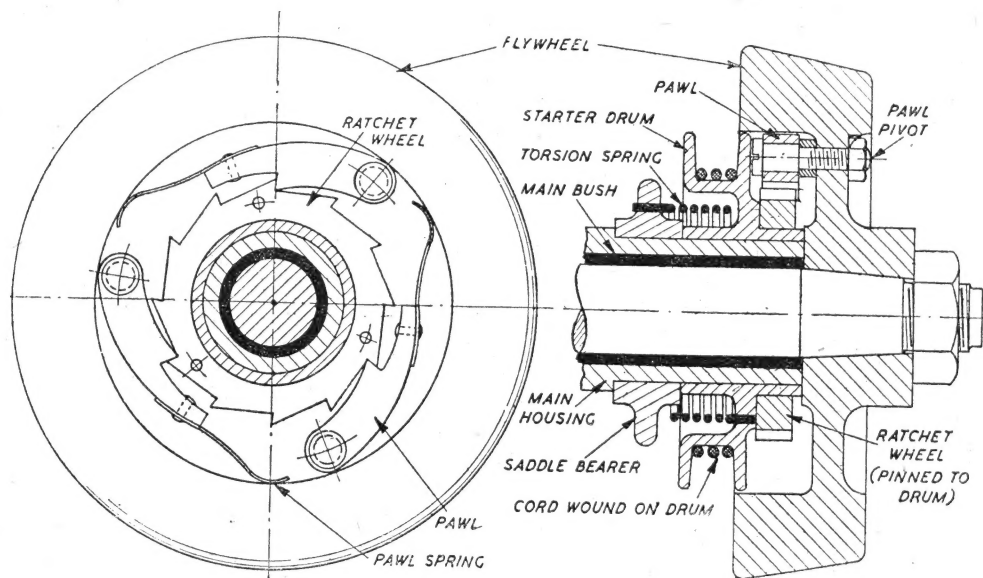
constructor might have produced if proper equipment had been available.

STARTING MODEL I.C. ENGINES

For very many years, in fact, it may be said practically since the model i.c. engine was introduced, engines of this type fitted to boats have almost invariably been equipped with a very simple vee pulley or grooved drum for starting purposes. Two methods of procedure have been adopted, the first consisting of winding string or cord several times around the pulley, with or without some means of anchoring the end to a hook or slot therein, so that the engine may be turned rapidly over several revolutions at one pull of the cord. The second method consists of using a leather or fabric belt of round section, which is used to grip the pulley by friction, much in the manner of an ordinary belt drive. These devices will, of course, be familiar

high-compression engines. The speed of rotation is usually somewhat lower, and the duration or number of turns on each pull is less, but against this, a considerably greater number of pulls are possible in a given time. This particular method of engine starting was, to the best of my knowledge, introduced in the 'twenties by our old friend, Mons. Suzor, and has been the favourite method among the model speed boat fraternity ever since.

I have had a good many queries from readers over starting difficulties, and in most cases their trouble has been the inability to get a really efficient grip of the belt on the starting pulley. Sometimes the material used for the belt is at fault, but more often it is the angle of the pulley groove. Some engine constructors use too shallow or obtuse-angled a groove, and I have even known them use a round-bottomed groove like that of a sash pulley. In these circumstances, it is hardly possible for the belt to



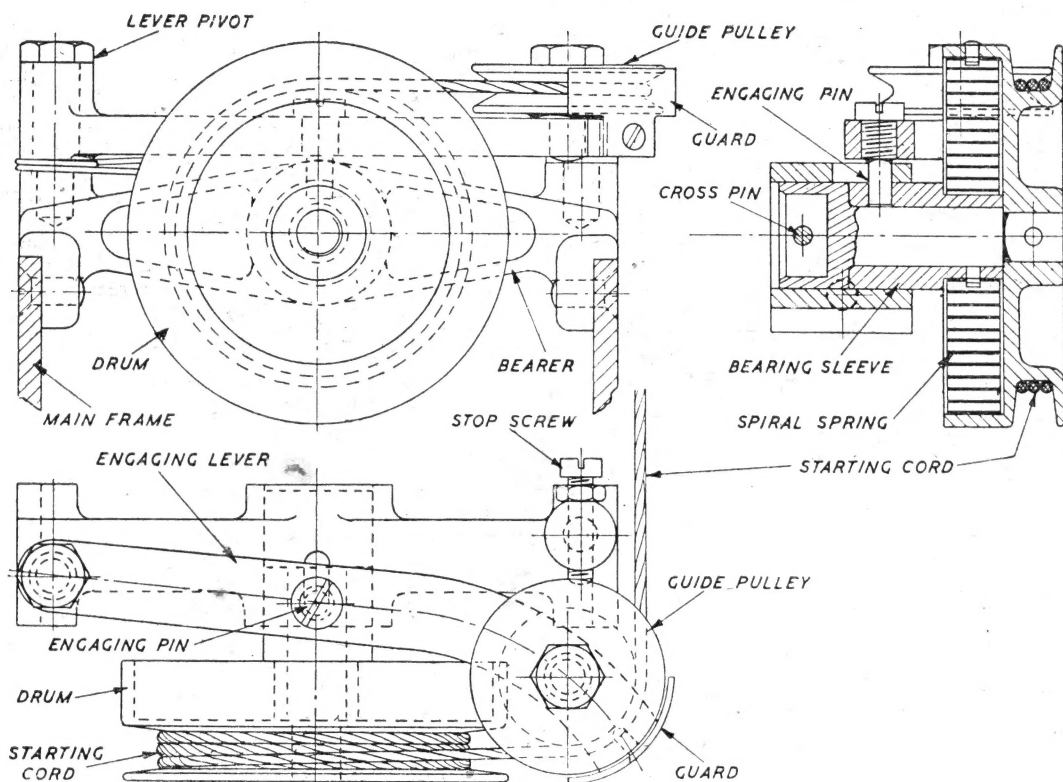
The built-in self-winding starter of the Atom V engine, the pawls of which are lifted out of engagement by centrifugal force when the engine starts

to practically all readers, but they are specified in order to show the essential differences in their efficiency or utility. In the first case, the cord provides a positive torque drive, and although there is usually a fairly considerable side-pull on the engine shaft, it does not depend on this pull for driving efficiency. It produces a fairly rapid engine rotation over a sufficient number of turns to ensure that the carburation and ignition of the engine get a chance to work reasonably well. Its disadvantage, however, is that the winding of the cord on the pulley may be a tedious and, in some cases, rather difficult operation.

With the second method, the grip of the belt alone provides the drive, and under certain conditions considerable slip is possible, particularly with

grip, unless a very considerable side-pull is applied, and should the belt become slippery, as it often does through getting wet, it becomes impossible to apply sufficient torque to the engine by this means.

On the strength of a good deal of experience with starting pulleys of this type, I have come to the conclusion that a groove having an included angle of about 40 deg. gives the best results. The size of the pulley, of course, affects both the gripping power and the speed at which the engine rotates, and the best compromise in this respect is to make the pulley about one-half to two-thirds the diameter of the flywheel. Ordinary leather belting gives good results as a starting belt, but woven hemp or cotton fabric cord is quite good, and may in some cases be less likely to become slippery when wet.



The detached self-winding starter designed for the "1831" engine, which engages the engine shaft through a sliding dog clutch

In either case, however, the belt should be kept free from oil or grease. Some engine users have suggested that a formed vee belt of the type as used on machine drives would be better than a round belt, but while this is true, it might be difficult to obtain the correct material, and there is also the possibility of the belt becoming twisted, so that it would not lie properly in the pulley.

IMPROVED STARTING DEVICES

Many readers will agree that the primitive starting pulley is, by no means, an ideal arrangement for engine starting, and several more or less successful "automatic" starters which dispense with the need for loose cords or belts have been devised. It is, however, a remarkable fact that engine users do not seem to take to new devices of this nature with any great enthusiasm. Many years ago, I experimented with self-winding cord starters which have worked quite successfully, and have been incorporated in some of my engine designs, including the "1831" engine and the Atom V. Most of the constructors of these engines, however, have omitted the starting device, regarding it as an undesirable complication or doubting its ability to work reliably. One of the simplest improvements to the plain starting pulley is to equip it with a ratchet, similar in general principle to a bicycle free-wheel. This is

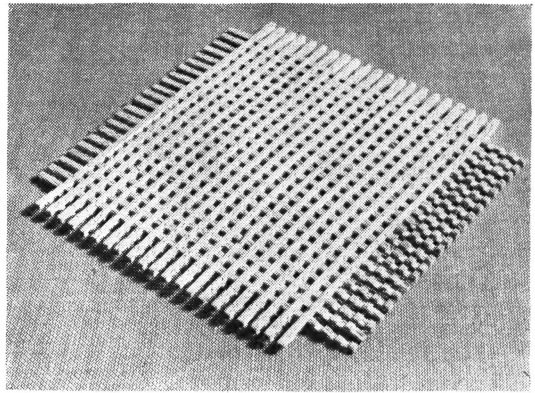
particularly useful when a cord starter is used, because it very much simplifies the task of winding the cord. An exact copy of a bicycle free-wheel would be rather difficult to construct, but an equally successful substitute is the plunger type ratchet which is illustrated here, and which I have fitted to several of my engines. It is quite an easy matter to drill three or more round holes radially into the flywheel boss and fit hardened steel plungers with light springs to keep them in contact with the internally cut ratchet in the starting pulley. The latter should preferably be made of steel, in one piece; the teeth can easily be hand-filed, and should be case-hardened.

The logical improvement to the simple ratchet is a device for winding it automatically, and this can be done by means of a helical or spiral spring attached to the pulley and having one end anchored to the engine bearing housing or other stationary fixture. The spring should preferably be enclosed in a housing, to protect it and also to limit its expansion. The simple type of positive-action pawl ratchet is liable to be noisy if it is held still while the engine is running continuously, and may also introduce undesirable friction, therefore, a further improvement is to use a "silent" type of ratchet, which, in place of using

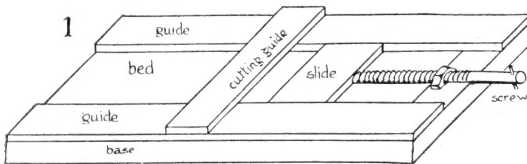
Continued on page 18

A JIG FOR THE MAKING OF SHIPS' GRATINGS

By R. J. Collins



THE making of gratings is one of those tedious jobs which has always presented difficulties to any but the *very* expert, and I imagine that even those few people were rarely happy over them. An inspection of some of the older dockyard models shows various methods ranging from a drawing on wood to a properly constructed article; a large number appear to have had the holes drilled, punched, or otherwise



made through a single piece of wood. As the human eye is capable of detecting a misalignment of 0.006 in. these holes have to be made very carefully to get by, and the smaller the scale the more difficult it is to produce a passable result.

The jig here described enables the ordinary modeller to cut pieces of wood of even width which can be fitted together to make a grating correct not only to scale but also to method.

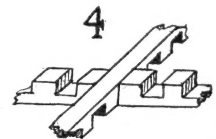
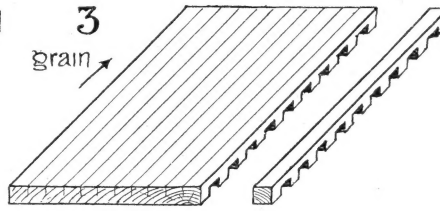
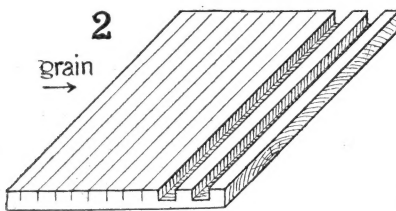
The drawing, No. 1, shows the jig which (without

they can be left entirely to the modeller. The base is made from a stout piece of wood; the top, which becomes the bed must be true and flat; this could be a piece of metal or plastic. The guides on either side must be parallel and of the thickness of the proposed gratings (mine is $\frac{1}{16}$ in.). The cutting guide is of metal forming a bridge over the bed and at right angles to the guides. The screw passes through a nut fastened to the head and lays half in a channel cut in the centre of the bed. A slide of thin wood or plastic, which must be a good fit, is made to move along between the guides.

So much for the jig itself, now for the method of using.

A length of wood, preferably of the same width as the bed, is passed under the cutting guide and pressed against the slide which in its turn is controlled by the screw. A cut is made across its width with a razor blade—or similar sharp tool—to half its depth. One or more turns on the screw and the wood is pushed forward for its next cut, and so on. When sufficient cuts have been made the wood is removed from the jig and the alternate grooves cleaned out as shown in sketch 2. I use an engraver's burr, No. 5/2, but any tool thin enough would do.

When this operation is completed the piece of wood must be turned over and again inserted in the jig, but this time with the grain *across* the bed and

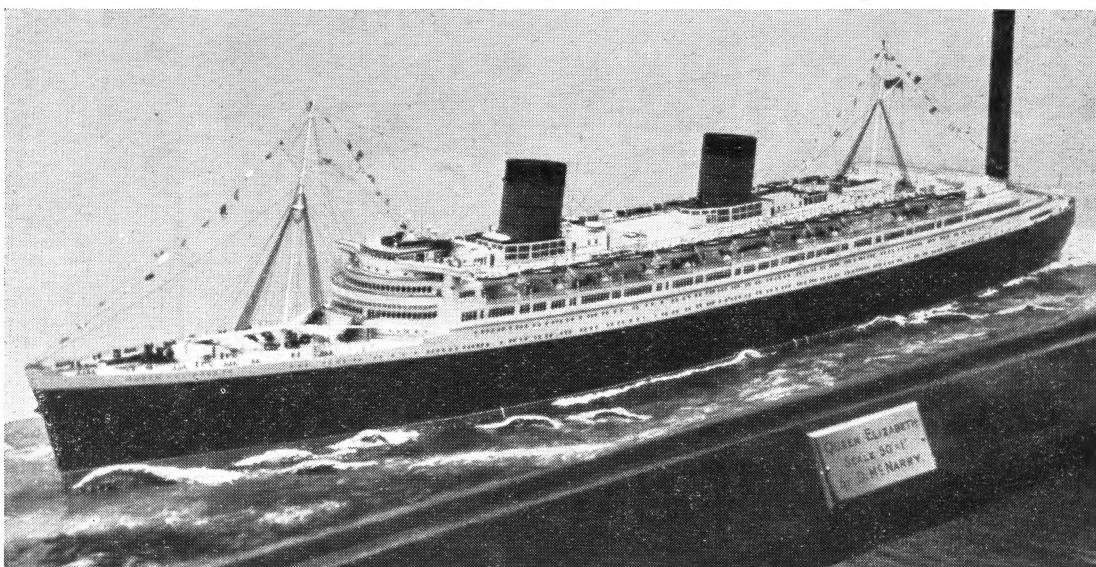


the screw) I used as a demonstrator at last year's "M.E." Exhibition. With it I could make a grating 3 in. square having $\frac{1}{16}$ in. holes in about twenty minutes. The article itself, except for the long screw (which cost 6d.) was made entirely from scrap and was built in a couple of hours. No sizes are given as

the grooves beneath, thus presenting a smooth surface to work upon. Repeat the scoring process already described and, of course, with the scores the same distance apart.

When this is done remove it from the jig and

Continued on page 8



Miniature Liners

By DONALD McNARRY

SOME time ago I wrote an article on two miniature windjammers and I feel that my further experiences in the construction of two miniature liners may be of some assistance to fellow modellers. Both were 50 ft. : 1 in. waterline models, one of the *Stirling Castle* and the other of the *Queen Elizabeth*.

The first obstacle to be overcome was to obtain reliable plans of the vessels I wished to build. To me this always presents considerable difficulty, as, although I have often heard other modellers speak glibly of their excursions into the realms of research and the excellent co-operation they get from the shipping companies, such luck has seldom come my way.

However, with regard to the *Stirling Castle*, I did manage to obtain, through the kind help of the Union Castle Line, some most excellent photographs and plans. These latter, drawn to a scale of $\frac{1}{8}$ in. : 1 ft., necessitated a certain amount of scaling down, and not being much of a draughtsman, the result was, if not artistic, at least more or less accurate.

My wife and I were also able to visit the *Stirling Castle* when she was in dock at Southampton during November, 1946, but unfortunately the vessel had not at that time been reconverted to passenger service so that the various wartime structural additions made our survey of the ship somewhat confusing, added to which it poured with rain and blew a gale most of the time.

In endeavouring to obtain plans and details of the *Queen Elizabeth* my usual bad luck in this respect returned. Messrs. John Brown, of Clydebank, proved adamant in their refusal to help; the Cunard

White Star Ltd. eventually produced a 32 ft. : 1 in. plan of the ship which, on subsequent comparison with aerial photographs, proved quite inaccurate in several respects and remarkably deficient in detail.

Nevertheless, with the aid of a Modelcraft plan, some drawings published in *Shipbuilding & Shipping Record* and the kind help of a member of the Sheffield Ship Model Society in introducing me by post to a friend in Glasgow in the know, a reasonably accurate model eventually emerged.

At this point I would like to recommend readers to the *Daily Mail* Photo Sales Dept.; they are most helpful and have a remarkable quantity of Press photographs, copies of which can be obtained at a reasonable price. I got some grand aerial photographs of the *Queen Elizabeth* when she was stuck on the mud off the Isle of Wight which proved very useful.

Although both these models were made separately, the *Stirling Castle* first and then the *Queen Elizabeth*, I shall try to describe their construction simultaneously.

The prototypes make a very interesting contrast and are good examples of modern marine architecture. The *Stirling Castle* is what one might term a "pretty" ship, with her pale mauve hull and white superstructure, open decks and plenty of exposed detail.

The *Queen Elizabeth* on the other hand, being built for the more robust conditions of the North Atlantic has a much more closed-in appearance and, being larger, entails a great deal more repetition work.

The two models when seen side by side are a most interesting study in workmanship improved by

experience, in fact, some of the work on the *Stirling Castle* compares so badly with the *Queen Elizabeth* model that I frankly wonder how the former was lucky enough to obtain the award it did at the 1947 *Model Engineer* Exhibition.

HULLS

Suitable pieces of American white wood were chosen and screwed and glued together to make the hulls. The hull of the *Stirling Castle* was fairly simple to carve as the sheer is unbroken up to the main deck, except for the opening under the fore deck and the smaller opening just aft of midships. Both of these were carved out at this stage and completed with the necessary details and decked over again with veneer and Bristol board, thus restoring the clean sweep of the sheer.

Great care was taken to get the flare at the bows and the bulge at the stern exact, as any inaccuracy here can completely alter the character of the vessels. A good test for accuracy of carving I find is to feel the hull with forefinger and thumb, both sides at once, with one's eyes shut; the tips of the fingers are much more sensitive to inaccuracy than the eye.

The *Queen Elizabeth* hull was made in the solid up to the promenade deck, suitable steps being cut out at the stern and one forward to make the fore deck.

To my mind the most difficult part of carving a liner hull is to get the correct sheer. The method I

the waterline, forming the base line, so that the model can be let into the sea for about $\frac{1}{8}$ in. Two holes were drilled in the underside of the hull to take the dowels that will later be let into the sea to peg the model down to its base.

A block of wood was also cut at this stage slightly wider and longer than the model and thick enough to turn on its side without over-balancing. The hull was fixed to this with two or more dowels and remained so during construction. This working block makes a firm base and saves touching the model with the fingers during building.

DECKS

Having completed the sheer line and also the carving of the hull, the decks were then laid. With both these models I used best quality Bristol board, giving it about ten coats of buff paint thinned with pure turps, each coat being given a good rub down when perfectly dry with a damp chamois and pumice powder, finishing with a rub to leave a nice smooth surface, not too bright.

The best idea I find is to estimate how much Bristol board you are going to require for all the decking of the model and then paint that much of a sheet and when the painting is completed, cut it out as you require it. This method saves a lot of time and messing about when it comes to roofing the deck houses.

The main deck of the *Stirling Castle* being flush had

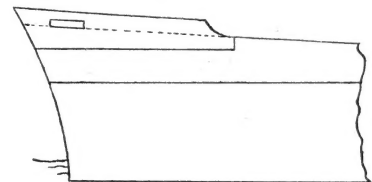
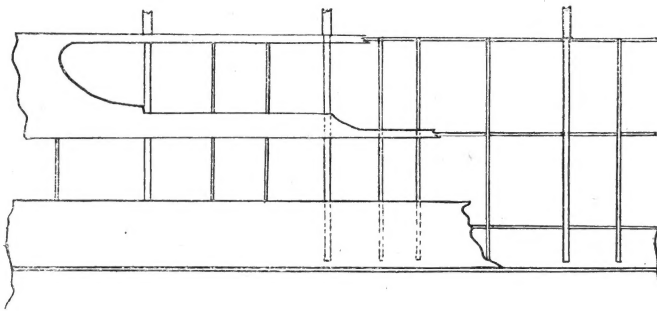


Fig. 2

Fig. 1 (left)

usually employ, and I have found it moderately successful, is to shape up the block of wood to the exact outline of the plan view of the model, allowing the maximum width when there is any tumble home or flare.

The sides at this stage were left entirely vertical and at right angles to the deck. The template stations were then marked on the side and the depth of the hull from the base line to the main deck level marked off on the station lines. A line drawn connecting these marks should form an even concave sheer line, the surplus wood above this being then taken off with a chisel working from both ends, and finished off with a cabinet makers' steel scraper. This latter tool when properly sharpened is an invaluable asset to the modelmaker, particularly when scraping a deck to obtain an even sheer.

A word here about the base line. In order to fix the model securely into its sea when completed, I usually allow about $\frac{1}{8}$ in. extra depth of hull below

one piece of Bristol board glued straight on to the wood and carefully trimmed off round the edges; at the same time I cut out the promenade deck, which stretches from just forward of the bridge to the stern, and the boat deck which is much shorter and ends just aft of midships. These two decks were pinned down to the hull with drawing pins (taking care to place the drawing pins so that the holes they make will be covered up with deck houses, etc.) and notches cut in the edges to take the upright stanchions; making the notches at this stage on all three decks together ensures that they line up exactly (see Fig. 1) when the model is assembled later on with the deck houses between.

I also cut out the small square holes in the various decks on the *Stirling Castle* where the ladders go, as if these are not in their correct position it can lead to no end of a bother later on, as I found out to my cost; the small square for the swimming pool was also cut out at this stage.

Decking the *Queen Elizabeth* was a much simpler problem as there are no open ladder ways going through the decks and very little superstructure to cause difficulty in aligning stanchions.

An inlay of Bristol board was fitted around the small forecastle (see Fig. 3). This was rather difficult as the nose of the *Queen Elizabeth* is very rounded and not sharp as in the *Stirling Castle*. A piece of 1/10 in.

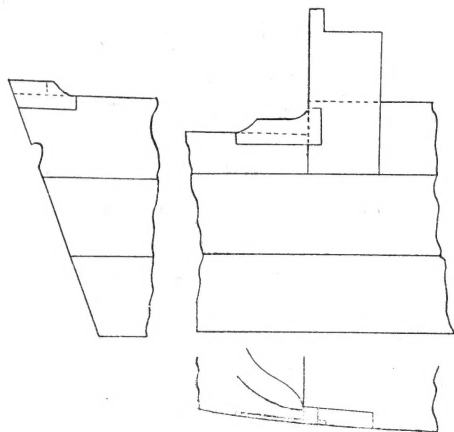


Fig. 3

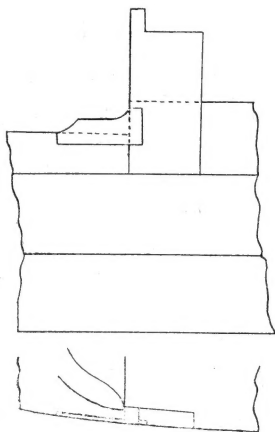


Fig. 4

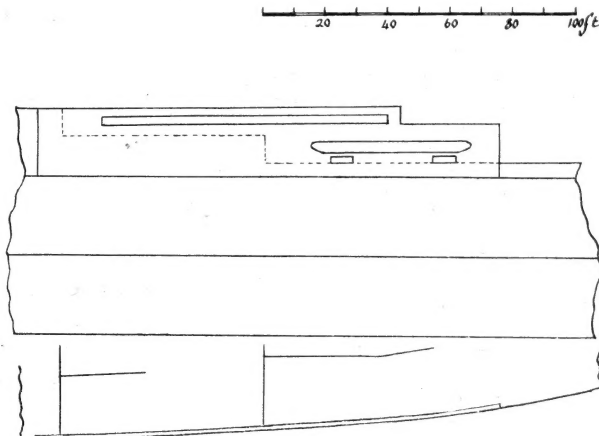


Fig. 5

EXTERNAL HULL DETAILS

It was necessary to inlay various pieces in the sides of the hull and these pieces were fitted in before any painting was undertaken.

The inlaying on the *Stirling Castle* consisted of a small piece of Bristol board to form the steel bulwarks right up in the bows (see Fig. 2). A shallow rebate was cut in the sides of the bows and a piece of Bristol board glued in and smoothed off nicely with flour sandpaper; the fairlead opening was cut out before fixing.

The inlays on the *Queen Elizabeth* caused me quite a bit of a headache before I eventually decided on a method of doing them. The peculiarity of the *Queen Elizabeth* is the way all the decks run into each other, as it were; each deck seems to connect with the next, and what with terraced decks at the stern and streamlined bridge fronts which did not correspond to the other deck levels, some small amount of ingenuity and wangling was called for.

thick holly (see Fig. 4) was inlaid on each side of the bridge together with a piece of Bristol board. These formed the two uprights that support the wings of the upper bridge; this inlay was necessary owing to the fact that the deck levels at the bridge are different from those on the rest of the ship.

A Bristol board inlay was fitted at the afterpart of the two lower decks (see Fig. 5); the openings on the lower decks for the windows and fairleads were cut out before this piece was glued into its rebate.

On both the *Queen Elizabeth* and the *Stirling Castle* I used Bristol board for most of the inlays, sometimes two thicknesses glued together, and if they were a little proud to the hull, smoothed them off with flour paper. However, I have since evolved a method of making very thin veneers of holly (or any close hard wood for that matter) which is a decided improvement, as this can be sandpapered with much better effect than even the very best quality pre-war Bristol board.

To be continued

A JIG FOR SHIPS' GRATINGS (Continued from page 5)

separate off the pieces. You should now have a number of fretted pieces as shown in sketch 3. These are now fitted together face to face. Sketch 4.

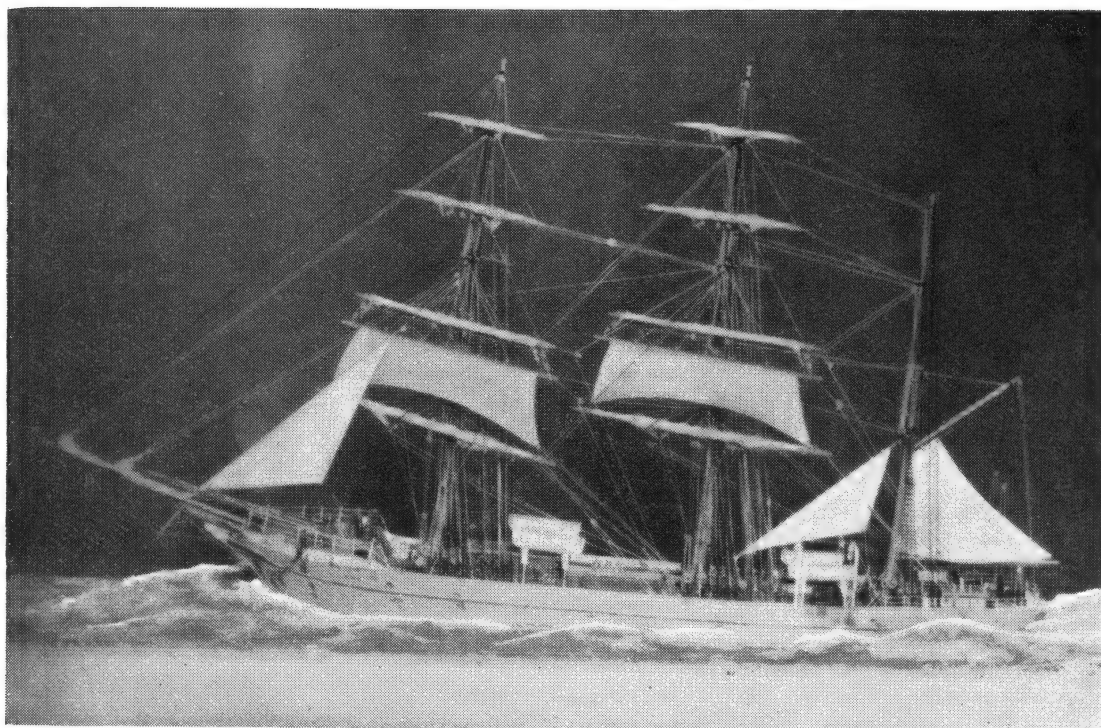
The grating should then be placed between two pieces of smooth wood, and compressed between the jaws of a vice, or by giving them a good hefty wallop with a mallet. The complete article can now be gently cleaned up with fine sandpaper and cut to size. I do not glue the pieces together as I find they hold quite well and in any case will be finally varnished.

I would also suggest that the original size be a

square of whatever distance apart your guides are, as this makes the subsequent operations easier. I do not recommend separating the pieces at the first cut (second operation) as this means having to take each little piece out of the jig, and the heavier cut needed sometimes breaks off the little blocks of wood.

Modellers will quickly see that this jig lends itself to other little jobs which may need a number of similar sized bits of wood; stair treads for instance.

Should any difficulties arise I shall be willing to answer any correspondence addressed to me c/o MODEL SHIPS AND POWER BOATS.



OUR READERS' MODELS No. 6

Mr. W. C. Smith's BARQUE "DOON"

OUR photograph this month shows a rather exceptional model of its type. Waterline models are usually made to a small scale, especially when they are of the scenic variety, but in this case the hull is 24 in. long from figurehead to taffrail making the scale just over $\frac{1}{8}$ in. = 1 ft. At this scale quite a lot of detail can be shown and full advantage has been taken of the opportunity. The rigging especially is very complete and the model as a whole is well proportioned. The ship is shown under heavy weather conditions with sail shortened to lower topsails and a storm spanker. The builder, Mr. W. C. Smith, of Liverpool, had the assistance in modelling the sea, of the late Mr. Leaske, who published a number of ships' plans under the name of "Ship Archives" before the war. The sea is a very

fine piece of work and suits to the amount of sail the ship has set. It was made from Keen's cement, which was painted and varnished after setting.

The barque, *Doon*, was built in 1877 by the London & Glasgow Co., for McIlwraith and Mr. Eacharn & Co., and was registered at Ayr. She was of 793 tons registered and 859 gross, on dimensions 195 ft. long, 32.9 ft. beam and 19.1 ft. depth. She had a poop 32 ft. long, and a forecastle of 24 ft. She was still in the Register in 1900 but I have been unable to find out when or how the end came.

The model was completed in 1939 when it won the Robert Gladstone Silver Cup in the Liverpool Ship Model Society's Exhibition. It was afterwards lent to the Liverpool Museum but unfortunately was destroyed when the Museum was blitzed in 1941.

OBITUARY

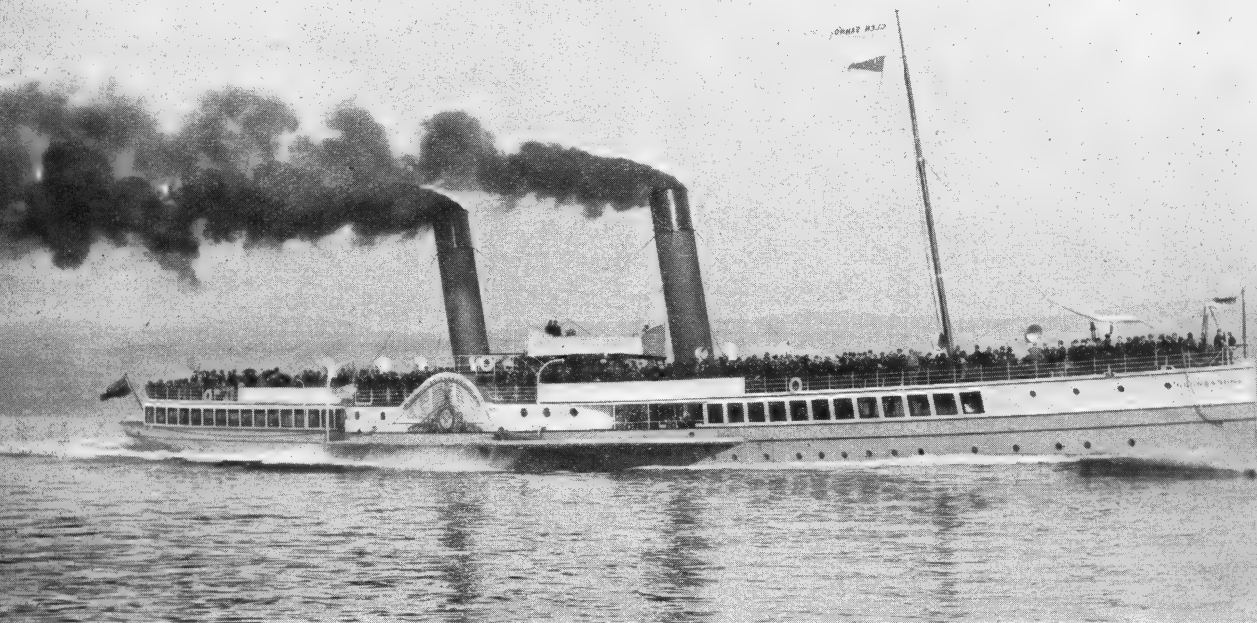
By the death, on January 26th, of Mr. Davey, the Bournville M.Y.P.B. club has lost its founder, chief inspirator and a loyal friend. His example of good sportsmanship and his high degree of skill in designing, building and sailing model yachts have been of immense benefit to the Bournville Club and to other clubs in many parts of the United Kingdom, and, in fact, of the world. His advice was sought by the leading personalities of the sport and by the novice, to all of whom he responded willingly.

In connection with a number of national events

he held the principal office and to the last he was a prominent figure in the Model Yachting Association of Great Britain.

Whilst the Bournville Club and his other creation the City of Birmingham Model Yacht Club remain in existence, they will be a monument to the excellent work he has accomplished in encouraging friendly, healthy, and enjoyable sport.

The present Commodore, and principal officers were present at the funeral service, held in the Parish Church, of Northfield.



P.S. GLENSANNOX

A $\frac{1}{4}$ -in. Scale Working Model

By A. S. Miller

THE art of ship model construction provides many problems such as choice of prototype, scale, and, if a powered vessel, the type of power unit. The screw vessel, whether single, twin or triple, has many advantages over the earlier method of propulsion, viz., the paddle, but a well proportioned paddle ship of the type built in the latter years of last century or, the early ones of this, can be a most pleasing working model if built to a scale approximately $\frac{1}{4}$ in. : 1 ft., resulting in a model of 5 to 6 ft. overall length. The large Denny built paddle steamers of the Belgian State Railways, or, those used in the Isle of Man or Irish Services, are instances.

The main drawback to a paddle ship is (a) the relatively short distance between the underside of the sponsons and the water level and (b) the tendency towards tenderness, because of the overhanging weights of the sponsons and their various erections, together with the wheels themselves. Mr. Victor Harrison carried out some most interesting and instructive experiments in this connection, which he described in the *Model Engineer* in August and September, 1944.

The prototype of the model to be described was a twin funnelled steamer belonging to the Glasgow and South Western Railway and launched in 1892 for the Clyde pleasure fleet. She was scrapped in 1925, and replaced by a turbine steamer of the same name. Her dimensions were 267 ft. overall, 30 ft. beam, and a depth to main deck of 8 ft. The extreme width over the paddle boxes was 65 ft., and this carried out to $\frac{1}{4}$ in. : 1 ft scale, gives a model $66\frac{3}{4}$ in. long, $7\frac{1}{2}$ in.

beam, and $16\frac{1}{4}$ in. overall width. To give stability, a draught of $2\frac{7}{8}$ in. has been adopted.

While a hull of these dimensions provides ample room for a steam plant, as the funnels were only 6 ft. 3 in. diameter or $1\frac{9}{16}$ in. to scale, electric motive power has been adopted.

One advantage in this type of ship is that practically all deck fittings can be included, as they are few in number, and thus maintain the characteristics of the prototype.

The old problem of the method of hull construction must be settled individually, as well as the extent of detail to be included. There are some tricky windows to be made if the model is to resemble the prototype exactly.

The sheer or rigging plan and the end views are for a model cut from the solid. At first thought, this seems a formidable piece of work, but tackled methodically, it is not so. To an expert, a metal hull might present little difficulty, but to obtain the nice easy changes of form, especially at the stern, the easier material to work with is wood.

A block of prime silver spruce or similar wood is required, straight grained and free from knots or shakes, and of dimensions 6 ft. long, 8 in. wide and 6 in. deep.

It is possible to obtain such a block, even nowadays, by hunting round friendly timber merchants, and one can, if lucky, come across yellow pine from blitzed premises.

All four sides should be squared up, and on both of the 8-in. sides, a centre line should be scribed the

Model Ships and Power Boats

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VOLUME THREE

MARCH 1950—FEBRUARY 1951



PERCIVAL MARSHALL & CO. LTD.

23 GREAT QUEEN STREET, LONDON, W.C.2.

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The dagger (†) denotes that the subject is illustrated with drawings

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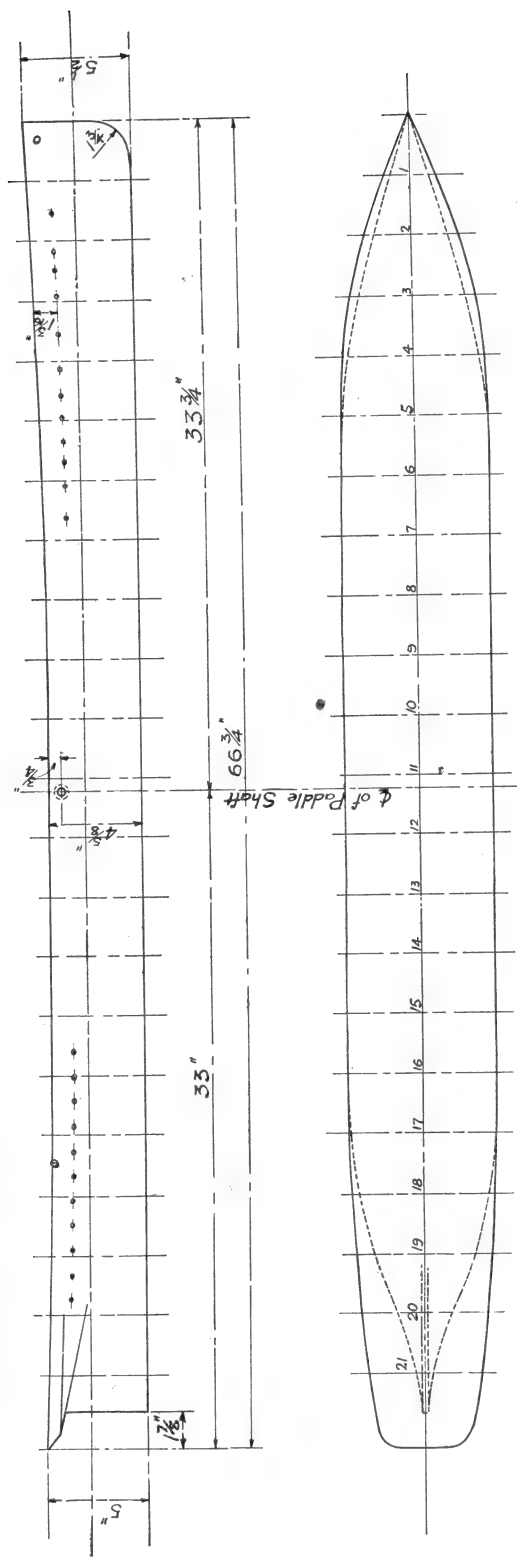
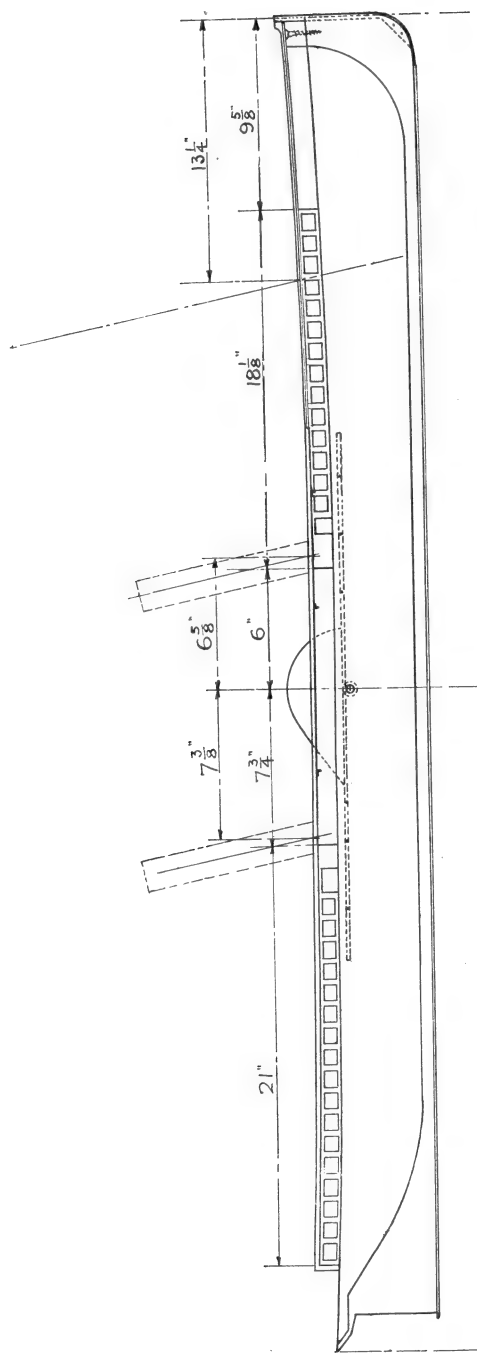
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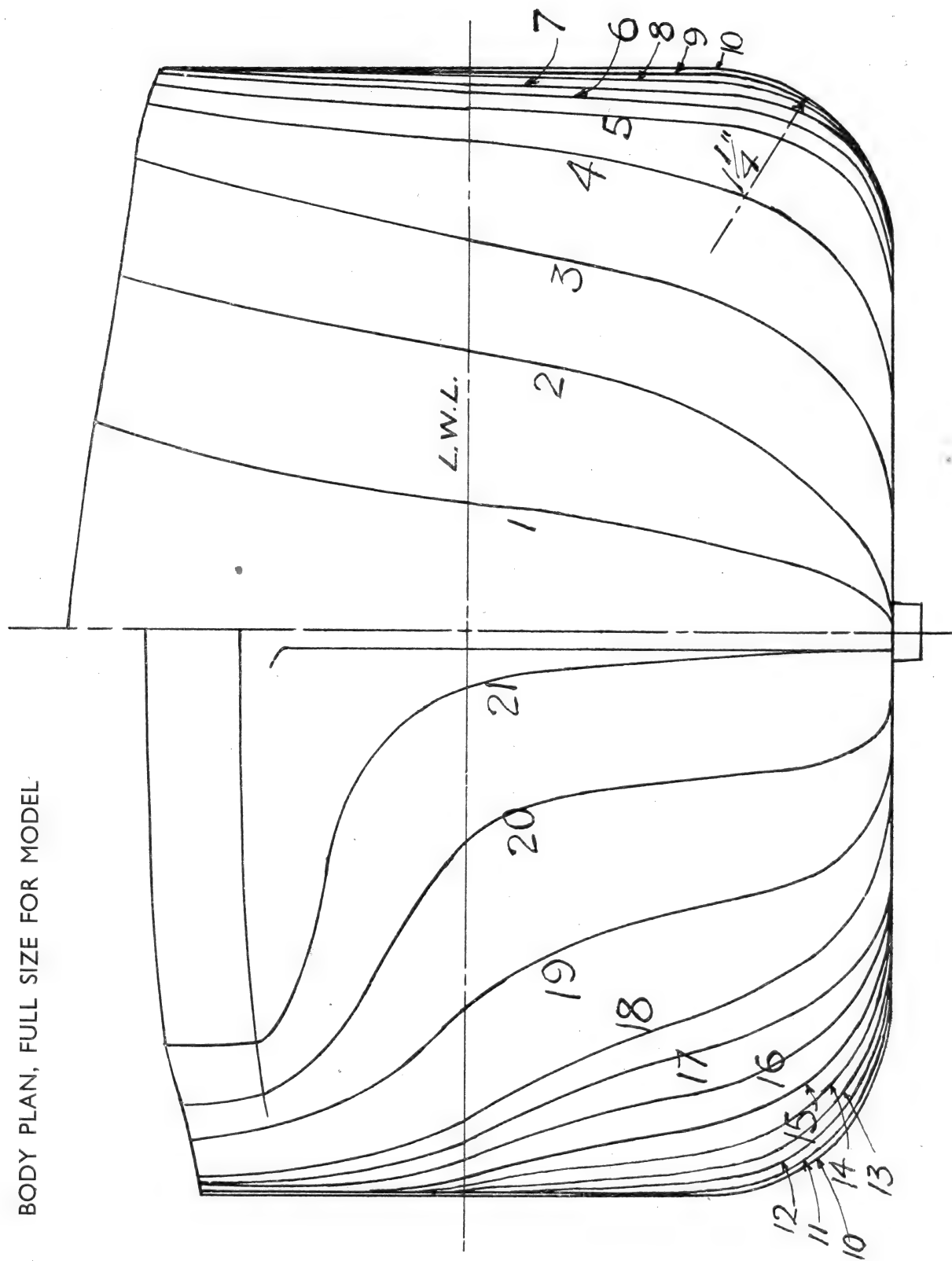
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Longitudinal Section, Profits and Plan of Hull.

BODY PLAN, FULL SIZE FOR MODEL



whole length. This line on one side should be marked off every 3 in., and this face is, of course, the bottom. On the other side, the main deck plan should be drawn. It is suggested here that, this plan be drawn on a piece of $\frac{1}{8}$ -in. cardboard or plywood and transferred to the block. Due to the flare of the fore saloon sides, forward of the mast, the promenade

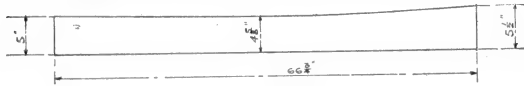


Fig. 1

deck plan is slightly different from the main deck. The block should be put under a bandsaw and shaped fore and aft. The sheer lines should now be marked on the 6-in. sides and the rise from midships to the bow and stern cut. The block will then look as in Fig. 1.

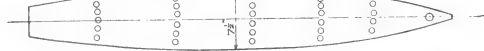


Fig. 2

At this stage, the initial hollowing out should be commenced by drilling with a 1 in. centre bit and brace, a series of holes at regular intervals on the deck face. The depth of these holes varies, of course, with the position, but along the centre line, they may be 3 in., except at the bow and stern. These are indicated on Fig. 2. The wood between the rows should now be removed by a $\frac{5}{8}$ in. hollow gouge and mallet. It is convenient to carry this out at this stage, because the block can be placed against stops, while the hollowing out is proceeding, without damaging the stem or stern.

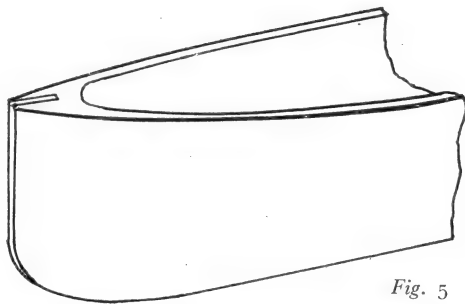


Fig. 5

The final shaping of the contour of the hull is now done by very sharp chisels, and a small handplane, with the templates for each section at the 3 in. pitch offered up as the work proceeds.

This preliminary digging out is only rough so far,

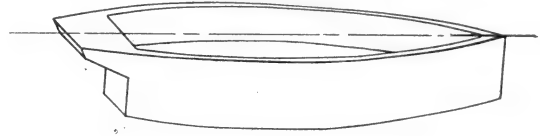


Fig. 3

as it must be borne in mind that the final hollowing out has a very definite relation to the external hull form. It is done when the stem or stern cannot be held against a stop on the bench, as it is hardly safe to grip the hull in a vice.

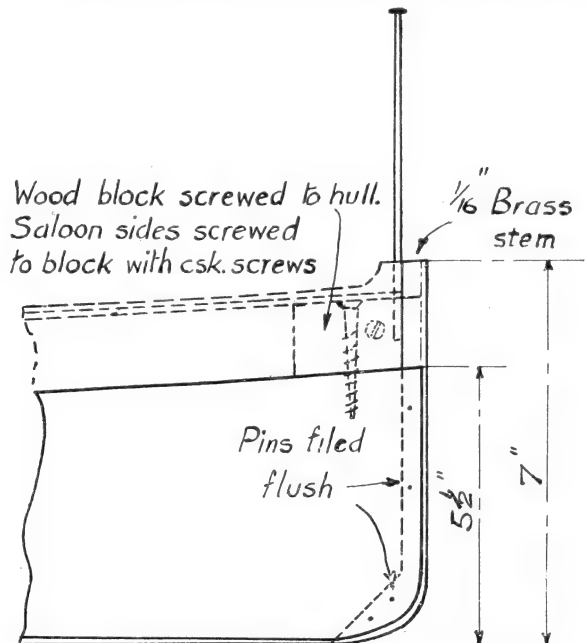


Fig. 4

The stern contour should now be cut, and the block left, as Fig. 3.

Personally, I prefer to finish one side almost completely before starting on the other, and I find it an advantage to leave the stem for about $\frac{1}{2}$ in. back, as it left the saw, until the whole hull is shaped and ready for glass papering. Fig. 4 shows the block at this stage.

The thinning down of the inside should now be carried out, and provided the tools are really sharp, all that is required is care and frequent check of the thickness by a depth gauge and large outside callipers.



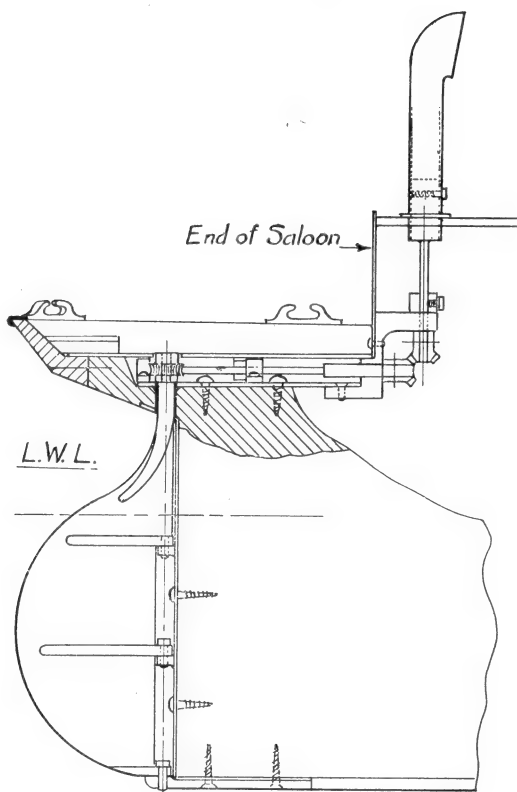


Fig. 6

The thickness of the sides can be brought down to $\frac{1}{4}$ in. with $\frac{5}{8}$ in. full on the bottom.

The final weight of the hull should approximate $5\frac{1}{2}$ lb., but this may vary with the wood selected.

The stem may now be completed by a piece of $\frac{1}{16}$ in. thick brass strip inserted into a saw cut exactly vertical, and on the centre line. The enlarged view shows the method of doing this, but it is advisable not to secure the strip finally in position, until the fore saloon sides are ready. The length of about $1\frac{3}{4}$ in., which extends above the hull proper, might easily be bent over by accident, and so break away the fineness at the bow. Fig. 5.

Before leaving the hull, there is one point to be mentioned. The round of the counter at rail level is on the cross-section of the block, and can easily be split or broken away. A separate piece should be shaped to the proper contour and let in, as shown in Fig. 6.

This must be very carefully fitted and glued into place, as an ornamental moulding runs round the edge, and the end grain would not provide a secure fixing.

The port holes along the hull should now be cut out and glazed as follows. As it is not possible to glaze these from the inside and maintain the correct distance from the face of the hull, they must be let in as shown in Fig. 7.

After setting out very carefully the position of each port, making sure they are all dead in line, drill by a $\frac{1}{4}$ in. centre bit a clean hole right through the side of the hull. Clean off the edge inside where the drill breaks through. A length of holly wood or horn-beam is required a full $\frac{1}{2}$ in. wide \times $\frac{1}{8}$ in. thick and long enough to cut into a number of rectangular pieces $\frac{3}{4}$ in. long. A length of 7 in., for instance, will make eight lengths, allowing for saw cuts. Now draw a horizontal line, exactly $\frac{1}{4}$ in. from one edge for the full length of the strip, and mark off at a full $\frac{3}{4}$ in. pitch 8 points. Drill a clean $\frac{1}{4}$ in. hole at these points, and cut off the $\frac{3}{8}$ in. lengths. Clean off the edges of the saw cuts and lay a piece central, with the $\frac{1}{4}$ in. hole already cut in the hull. Mark the outline in pencil all round, and make an indication on each piece, so that it belongs to its own particular port. The wood inside this marked space should now be cut out perfectly flat for a depth of $\frac{1}{16}$ in. With the

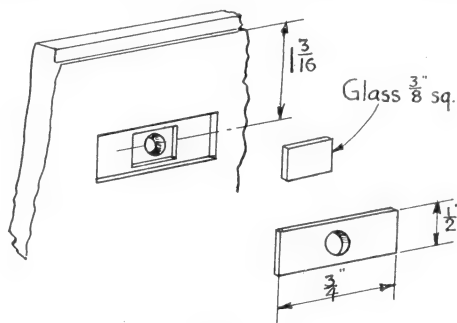


Fig. 7

$\frac{1}{4}$ in. hole as centre, cut out a square of $\frac{3}{8}$ in. side, a bare $\frac{1}{16}$ in. deep, and, into this a piece of thin glass negative, $\frac{3}{8}$ in. square is pressed, and fixed by Durofix or other transparent adhesive. Old $\frac{1}{4}$ in. plate negatives are excellent for this as they are just thin enough. Now into the $\frac{3}{8}$ in. \times $\frac{1}{2}$ in. recess, the piece which was used to mark the outline should be pressed. This can be done by placing the hull between vice jaws, and closing the jaws, but be careful not to put too much pressure, and so crack the glass. Finish off all the ports in this way, and you will have a number of projecting strips all along the hull. These strips should, of course, have all been set by Durofix. When the adhesive has hardened and set, all the projections should be carefully planed off, until they are perfectly flush with the hull. The final rubbing down with varying grades of glass paper should now be carried on until absolute smoothness is obtained. Provided care is taken with the work when painting is completed, there should be nothing to show the insertions in the hull, and the ports will be watertight. It will be realised that, first of all, a fairly close grained wood is required for the strips, and secondly, clean cut round holes as ports.

If preferred, of course, the ordinary commercial side lights may be pressed in at the appropriate positions, but the flanges of these should be flush with the hull.

To be continued

★GLUES and ADHESIVES for Marine Modellers

PART III

By H. B. TUCKER

FROM the marine modeller's point of view, one of the great drawbacks to the use of synthetic resin glues is their comparatively short shelf life. This varies with different makes of glue, but is only a matter of months in any case. Makers usually date tins of resin when they are made, and over-age glues should not be used. Makers' instructions with glues cover this point.

However, this disadvantage has now been overcome by the production of dehydrated glues in powder form. These powder glues are mixed with water and then become ordinary resins. While in powder form they keep indefinitely and their shelf life commences only when they are mixed with water. Resins either dehydrated or in their made-up or ordinary form should always be kept in closed containers. If a skin forms on a made-up glue by reason of it being left exposed to the air for too long a time, this should be skimmed off, as any attempt to stir it in is liable to produce lumps.

The shelf life of most hardeners is indefinitely long. Care should be taken, nevertheless, to see that the caps of containers are replaced immediately after use, as any evaporation will alter the strength and consequently affect the pot life and setting time of the glue. Containers should be kept in a cool but not cold place, and out of the sun.

Hardeners, being acid, should be kept in glass or earthenware pots. Resins can be kept in tins. Any mixing should be done in glass or earthenware vessels. These glues must on no account be put into brass or copper vessels, and this applies alike to resins, hardeners and mixed glues. All mixing vessels and implements used for spreading must be washed in hot water immediately after use.

As the arms are more tender than the hands, sleeves should not be rolled up. Glue must never be allowed to dry on the skin, and any cut or abrasion on the hands must be kept well covered. If the glue is used frequently—all day and every day—it is advisable to take certain precautions against dermatitis, but these are very simple. Before using, the hands should be washed and a protective cream applied. This, however, is superfluous for the model maker using the glue only occasionally, and all that is necessary is to wash the hands thoroughly after the job is done, or when one breaks off for any reason. Further, glue should never be allowed to dry on the skin. Given reasonable care there is no need to be nervous about using these glues.

The best applicator to use for the resin is a wooden spatula or paddle, which can easily be made from a piece of thin wood. In the *separate application* method, the catalyst can be applied by means of a

felt spade made by binding a piece of felt on to a wood handle. If a brush is used for this purpose, it must be washed out immediately with hot water when the work is finished, or it will be ruined, but in any case do not use a good or expensive brush.

No alkali must come into contact with these glues, or they will be spoiled.

A very excellent example of a resin glue for model-makers' use is Aerolite 300 which when reconstituted becomes Aerolite 306F. This is a dehydrated glue, gap-filling, applied by the *separate application* method, and is actually a cold-setting glue of the U.F. family. Several hardeners of different speeds are available, but for most purposes Hardener G.B.M. will be found satisfactory. It is made by Aero Research Ltd., Duxford, Cambridge, and distributed by Messrs. J. M. Steele & Co. Ltd., 36-38, Kingsway, London, W.C.2.

Should the worker desire to remake a joint with resin glue that has previously been made with casein or any other adhesive, it must be planed off thoroughly before re-making.

Makers sometimes recommend leaving the spread surfaces open for a period to air-dry before the joint is assembled, but this is a relic of the earliest resin glues and is no longer necessary or advisable.

One advantage of resin glues is their very low moisture content, which means that laminated constructions made with them, are less liable to warp than those made with other glues.

Wood has not only the property of absorbing moisture from immersion, but when out of water will either absorb or give out moisture until its moisture content is equal to that of the surrounding atmosphere, and it swells or shrinks accordingly. Thus, if one glues a very dry piece of wood to a very moist one, the dry piece will absorb moisture from the air and swell, while the moist piece emits moisture and shrinks. This naturally causes warping and splitting, so it becomes an axiom that pieces of wood of widely different moisture content must not be used in laminated constructions. This applies particularly to thick planks, such as the 1 in. layers in a bread-and-butter boat. Contrary to what one would expect, dense, heavy hardwoods swell more than light, porous softwoods, due to their higher proportionate volume of wood substance. A plank does not increase in length as it swells, but only in breadth and thickness. Another point to bear in mind is that planks otherwise exactly similar may swell differently due to having been cut in a different way from the log. Hence a board with a radial grain must never be glued to one with a tangential grain.

In cramping up joints made with resin glue, particularly those made with a gap-filling glue, only

*Continued from February issue, p. 236

sufficient pressure is needed to keep the parts of the assembly in their respective positions and in contact all over. The application of greater pressure will not increase the strength of the joint but will give a thinner glue-line.

Laminated bent constructions should be left about twice as long under pressure as ordinary joints. Always put a sheet of newspaper between the work and the jig or cramps, as if they adhere to the wrong thing, it will be difficult to get them adrift.

When laminated bent constructions are made in two-ply, there is quite an appreciable tendency for these to straighten out when taken off the jig. This tendency is less marked in a three-ply construction, and a four-ply one has practically no tendency to move. When five plies are used there is a tendency for the construction to bend inward.

Resin glues are particularly suitable for the laminated construction of model yacht hulls, when they can be used with really fast accelerators.

These articles are concerned primarily with bonding of wood members, so we will assume the builder has his former (or jig) made and the backbone of the hull, in position and is ready to start planking up the hull with veneers.

Cut the veneer into strips from 1 in. to 1½ in. wide with scissors. Take the first strip and trim off one end to fit into the garboard rebate at the correct angle. Pin it in place temporarily about the centre of the boat. I do not know if those glass-headed drawing pins that used to be sold for pinning up photographic negatives to dry, are still available, but they are ideal for this job as they are so easy to put in and pull out again. Mark the position of one edge of the strip on the former. Take another strip to go alongside the first and offer it to the hull. It will be apparent that the two edges will not fit together as the strips have to be wide on the

bilge turn and narrow at the garboard. Pin the second strip in place overlapping the first so that no gap shows. Take a sharp pencil and run it along the edge of No. 2 marking No. 1. Remove No. 1 and cut the edge to shape.

It will only be necessary to cut one edge of each strip in a normal boat, and the builder must work along the whole length of the boat, shaping the strips and pinning back in place until the whole former is covered. Incidentally, the former should be covered with newspaper, or better still with cellophane before the strips are put on.

If the strips of the first skin rake forward, those of the second skin should rake aft. They are fitted in a similar way, and as each is finally shaped, it should be glued in place. Assuming that the *separate application* technique is being used, the hardener can be applied to the under-skin and the resin to the outer one. This will be more convenient because of the pins holding the first skin to the former. These pins are, of course, taken out one by one as you come to them in fitting the second skin, and are replaced through both skins, thus holding the two skins together and the two to the former. As a gap-filling glue is being used, only sufficient pressure is needed to keep the surfaces in contact.

From these articles it will be seen that the only glues suitable for the marine modeller, including the showcase model builder, are the casein glues and the synthetic resin glues, but in the latter care has to be taken to select a variety adapted for our purposes. Many marine modellers who have never tried them are afraid to venture to employ the resin glues, but I can assure them that once they have used them, they will not wish to revert to casein or any other adhesive, but will find them easy to handle, as well as being sure and quick setting. The one caution is to follow the makers' instructions implicitly.

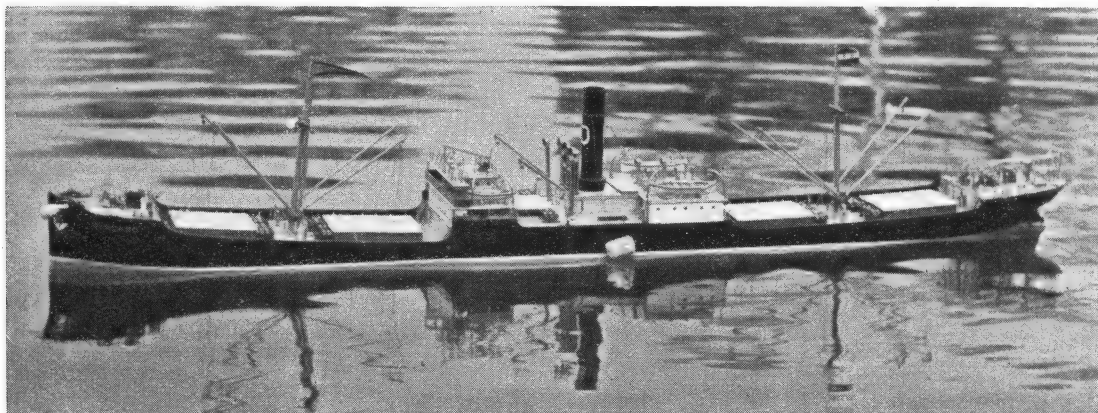


Photo by Henry Grant, London, N.W.3

A fine model of the Dutch cargo vessel "Dykland," which was built by Mr. P. W. Silverstone, of London. The long graceful proportions of the hull have been faithfully reproduced in the model. Mr. Silverstone spent nearly three years in building this model, which is 4 ft. long by 5 in. beam. The hull is planked on frames and the deck details are very realistic. The power unit is a Klaxon motor with three 4 volt Varley dry accumulators giving a current of 12 volts

ECHOES OF THE PAST No. 5



IN browsing over old photographs one occasionally sees one which has a special appeal. Such a one is that which is reproduced below, and which was taken in Newcastle, New South Wales, in 1875. It was probably taken on a fine Sunday afternoon, when work was suspended and the people were enjoying their leisure. The men are all dressed in their best clothes and the group of women on the left are enjoying a quiet chat. Everybody seems to be conscious of the photographer as he had most likely asked them to keep still for a moment, plate speed being very much slower in those days than now.

Ship models were popular then as now, the full-rigger in the foreground attracting a wonderful circle of children and young people. It looks like a sailing model, with its rigging incomplete, and was probably based on the ship in which its builder had come to the new country. The big cutter in the centre shows what a tremendous spread of sail such craft

carried in those days. What a contrast with the tall, narrow sail plan of the present day! The little fore and aft schooner on the right seems nicely proportioned.

With regard to the ships it seems rather strange that out of such a number only two are steamers and one of these is provided with masts and yards. Quite a number of the ships are drying their sails and there seems to be not a breath of wind. The barque on the left has a main skysail, a feature not often met with in the barque rig. Barques and brigs seem to predominate, although there is at least one brigantine in the picture.

We found the photograph when going through the collection which was acquired recently by the Bristol Shiplovers' Society and which is now housed in the Bristol Central Library. The collection was made by the late Capt. Cockell, of Maryport, Cumberland, and was presented to the Bristol Shiplovers by his widow.

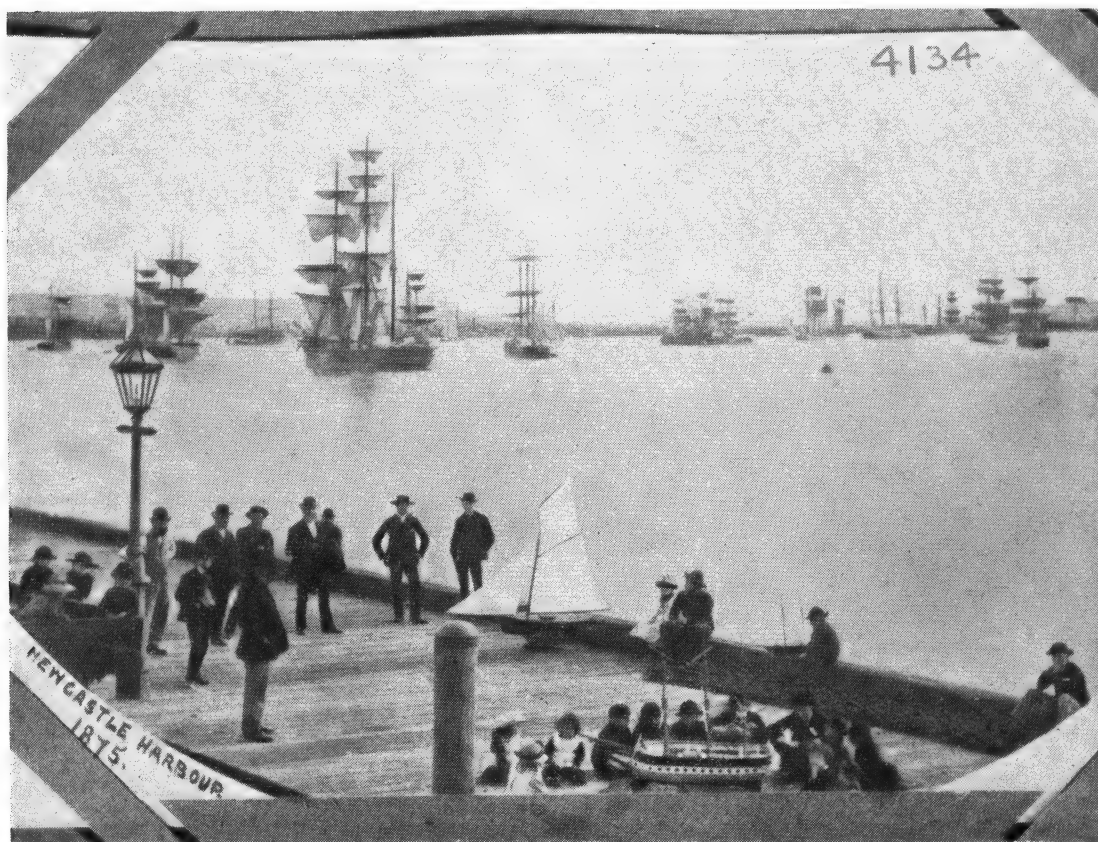


Photo by courtesy of the Bristol Shiplovers' Society



The Model "Cutty Sark," at the National Maritime Museum

Photo by courtesy of The Admiralty

FOR THE BOOKSHELF

THE COMPLEAT MODELLIST

"The Compleat Modellist," published by the Association of Ship Model Societies, at 15, St. James's Crescent, London, S.W.9. Price 9d., post free.

We have received a copy of No. 1 of this publication and although at present it consists of only twelve pages we can recommend it to our readers, especially those interested in old-time ships. The introduction is by Lt. Col. Howard I. Chapelle, U.S.A.R., and is followed by a foreword by the chairman of the association, Mr. Wm. T. Honey, and an editorial outlining the policy and scope of the journal. The principal article in this issue is on "Simple Sailmaking to quarter-inch Scale." This is thoroughly practical and the methods described should produce a very realistic sail; the diagrams accompanying the article are very clear and useful. A list of the Ship Model Societies with name and address of their respective secretaries, a number of queries, and a few news items of general interest, complete a very interesting little magazine.

MODEL POWER BOAT TOPICS

(Continued from page 4)

positive-engagement pawls, utilises the friction grip of balls or rollers working on inclined planes. There are several types of these ratchets; one of the simplest, which is quite easy to construct, is that, shown herewith, which was used on an early engine of mine, Atom II, produced in the early 20's. In the case of the Atom V engine starter, the ratchet has external teeth, and the pawls are attached to the flywheel and so arranged that they are lifted out of engagement with the ratchet by centrifugal force. The starter for the "1831" engine utilises a different arrangement again, and provides for disengaging the complete ratchet pulley from the end of the engine shaft by endwise movement.

There are a good many other devices possible for facilitating engine starting, including the use of power-driven (spring or electric) starters, but these described are the simplest and most straightforward types, which have been found quite successful in practical use on small boat engines.

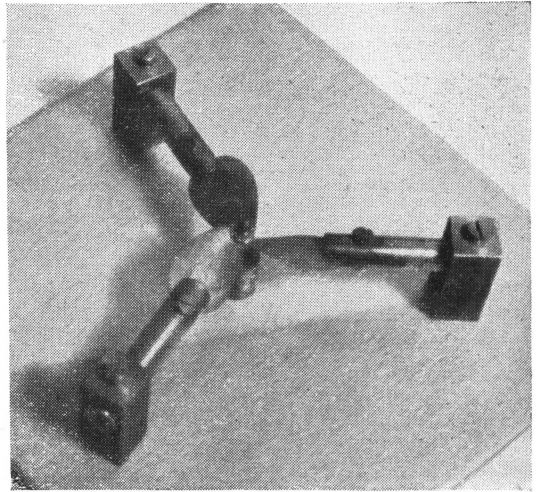
To be continued

A JIG FOR MAKING PROPELLERS

by MATS HEDE of Stockholm

IN fabricating a propeller for a model boat one of the chief problems is to set the blades so that they are each at the correct angle, and to hold them firmly in that position while silver soldering or brazing them to the boss. In the jig shown in the photograph and description sent us by Mr. Mats Hede, of Stockholm, Sweden, the holders for the blade are firmly gripped by the screws in the vertical posts and they can each be set accurately by the use of a protractor resting on the baseplate. Mr. Hede's letter goes on to say:

"The construction is very simple and can readily be understood from the photo. The jig is made of mild steel and consists of a baseplate with a central pivot to take the boss and a holder for each blade of the propeller to be made. The holders are evenly spaced on a circle and have means to keep the blades in exact position, properly divided and at the right pitch angle during the brazing operation. I have not found it necessary to make any slots in the boss for the blades, as the brazed or silver soldered joint is strong enough in itself, if the blades have a reasonably good fit against the boss and a good fillet of solder is formed."



The jig with blades and boss in position

Editor's Correspondence

DEAR SIR,

I read with great interest Mr. Kenneth Williams's letter in your January issue, and was particularly interested in his mention of a report in a newspaper to the effect that the P.S. *Brighton Queen* had been seen running on the River Weser in Germany.

When the paddler on the River Weser was seen to be bearing the name "Brighton Queen," it was reported to the military authorities in Germany, who referred the matter to my father, the Superintending Sea Transport Officer at the Hook of Holland. Being a seafaring man, and also a native of Penarth, a popular port of call of the P. & A. Campbell steamers, he followed up the report with keen interest. Enquiries to the owners and the Admiralty both brought the information that the P.S. *Brighton Queen* had been lost at Dunkirk.

On further enquiries being made in Germany it was found that the particular steamer running on the River Weser was a small paddle vessel built for service there. Some soldiers had "touched it up" a bit and had carefully painted the name "Brighton Queen" on the paddle-boxes. Hence, the newspaper report that the grand old paddler of the south coast was still afloat. Incidentally, I feel I cannot close this letter without some mention of the two magnificent new paddlers which have come to help fill the gaps which were torn by the war in the ranks of P. & A. Campbell's fleet.

I mean, of course, the *Bristol Queen* and *Cardiff Queen*. With their triple-expansion engines and greatly increased saloon accommodation, they surpass the high standard of comfort afforded by the pre-war vessels. A long day trip from Cardiff to Ilfracombe and back in one of these new paddlers is an event to which I look forward each season.

Yours faithfully,

Penarth, Glam.

R. W. HERSEE.

DEAR SIR,

Thank you for your letter dated the 29th, reference "Small Wood Screws." I have today spoken to the Liverpool representative of Messrs. Nettlefolds, who inform me that the works stock these in $\frac{1}{4}$ in. \times 0, $\frac{1}{4}$ in. \times 00, and $\frac{1}{4}$ in. \times 000, and he will obtain one gross of each for me. I am letting you know this thinking it might be useful for other model makers at some future date.

Yours faithfully,

Waterloo, Liverpool, 12.

E. WHITAKER.

We print this letter as from time to time we receive requests as to the supply of very small screws; both with regard to the sizes obtainable and where they may be purchased.—(Ed.).

SHIP MODEL SOCIETY NOTES

By "JASON"

A sailor friend of mine writes from abroad asking for help in obtaining plans and elevation of an *Aberdeen White Star* Clipper. He mentions a list of possibles but does not want *Thermopylae*. His first choice is *Salamis*, or any of these: *Romanoff*, *Miltiades*, *Aristides* or even *Samuel Plimsoll*. I'm afraid he will have great difficulty in securing anything authentic but it is not impossible. Anyway, I am indicating a possible source which may be able to satisfy his requirements. Incidentally, he is tackling a subject which is seldom attempted, a sailing ship hove to in bad weather under shortened down canvas. His scale is somewhat unusual, i.e., 20 ft. to 1 in., and he intends to show all detail such as jackstays, footropes and stirrups.

A letter from E. N. Taylor, whose excellent models are a feature of recent exhibitions, tells me he is retiring from the secretary's job of the *Solent Shiplovers*. His scale is the unusual one of 25 ft. to 1 in., and on several occasions he has been a serious contender for cup honours. His present work-in-progress includes in its make-up, wood from the S.V. *Archibald Russell* and the 1914 R.M.S. *Aquitania*.

The *Ipswich Ship Model Society* (whose official name is *Ipswich Nautical Research Society*) is a body after my own heart. They are concentrating on local ships and sea affairs. They are in touch with local historical and scientific societies and, as a result, cover a much wider field in ship research than they would if working alone. Mr. H. W. Moffat, the founder-secretary, has done fine work.

A long letter from Harold Underhill, of Glasgow, among other things, confirms what I have thought for many years, namely, that in the middle and larger scales it is much easier work to "plank on frame" than to cut from the solid or laminate, i.e. build up "bread-and-butter" fashion. I really think that lots of people are unnecessarily scared about starting in spite of the excellent demonstration work at last year's Exhibition by Collins, of South London. Why not celebrate Festival year by a trial run at timbering and planking?

By the time you are reading this, twenty clubs are combining for the third annual exhibition in Manchester, on March 16th-18th. Although this is mainly an engineering show the ship modellers are well to the fore. The *Sheffield Ship Model Society* are prominent exhibitors but I'm told that they will meet some keen fighters this year. Twenty years ago Manchester had a flourishing ship model society second only to Liverpool. Has the time not come to revive it?

The showing of the *Peking* film on the Company's ship, *Wellington*, recently, is a reminder that such films are valuable documents. The print is now old and well worn. Surely it is possible to get a new print from the negative. There is also the print of the *Grace Hawar* film which had a showing in the cinemas a few years ago. We are indebted to the Honourable Company of Master Mariners for the hospitality accorded to the *Thames Shiplovers* at their annual meeting at which this film was shown and I have no doubt that what can be done will be done in preserving such pictorial records of the last days of sail. The *Peking* film was taken about 1926 and shows incidents and circumstances on a passage from Hamburg to Talcahuano in Southern Chile. At that time the *Peking* was owned and sailed by the Germans. An interesting commentary was "spoken to the film" by Commander C. H. Williams, R.d., R.N.R., a member of the Honourable Company of Master Mariners.

NORTHERN MODELS EXHIBITION

The Northern Association of Model Engineers has arranged for the third Northern Models Exhibition to be held at the Corn and Produce Exchange, Hanging Ditch, Manchester, from March 16th-18th. The marine model section includes working steam or power boats (displacement type), hydroplane and speed boat types, sailing ships (non-working), working model yachts and sailing ships, uncompleted models, and miniatures (under 15 in. L.W.L.). This should be an important exhibition for the ship-modeller as difficulties of transport prevent some of the best north country models being sent to the London "Model Engineer" Exhibition.

In addition to the competition and loan models, we expect to see a selection of models from overseas, these giving an international aspect to the exhibition.

Amongst the radio-controlled models, there will be some of the boats which will be demonstrated on the Model Pond at the "Festival of Britain" (South Bank).

Further particulars may be obtained from the Publicity Secretary, BRIAN N. HOLMES, 71, Woodheys Drive, Sale, Manchester.

INTERNATIONAL RADIO CONTROLLED MODELS SOCIETY

The meetings for the above Society during March, are as follows: London Group: Sunday, March 11th, at 2.0 p.m., at the Horseshoe Hotel, Tottenham Court Road, London. Annual general meeting. Birmingham Group: Saturday, March 3rd at 2.30 p.m. in the History Class Room, University of Birmingham, Edmund Street, Birmingham.

Manchester Group: Sunday, March 18th at 2.30 p.m., at Wellington Chambers, 2, Victoria Street, Manchester.

Hon. Secretary: T. F. SUTTON, The Lodge, Manchester Grammar School, Manchester, 13.

THE MODEL POWER BOAT ASSOCIATION

At the annual general meeting, held recently in London, it was decided amongst other things, that the bridle or other line will now be 48 in. from centre of boat to point of line attachment instead of 24 in. as formerly.

Fixture List to Date

May	6th	...	...	...	...	Northern Association
"	6th	...	...	...	...	South Eastern Association
"	12th (Saturday)	...	...	...	...	Welling (no speed events)
"	14th (Whit Monday)	...	...	...	...	Bournville
"	27th	...	...	...	...	Victoria
June	3rd	...	...	...	...	Enfield
"	9th (Saturday)	...	...	...	...	Coventry
"	16th	...	...	...	...	International
"	17th	...	...	...	...	International
"	24th	...	...	...	...	Blackheath
July	1st	...	...	...	...	Orpington
"	1st	...	...	...	...	Derby
"	8th	...	...	...	...	Wicksteed
"	15th	...	...	...	...	St. Albans & North London
"	22nd	...	...	...	...	South London
Aug.	12th	...	...	...	...	West London
Sept.	2nd	...	...	...	...	Grand Regatta
"	16th	...	...	...	...	Kingsmere

The South London Club is running two Festival of Britain regattas in conjunction with the local council. Dates: May 30th, September 23rd.

Geneva Regatta—August 11th-12th.
Paris Regatta—September 9th.

THAMES SHIPLOVERS' AND SHIP MODELS SOCIETY

The lecture for March will be given on March 22nd on board the *Discovery* by Mr. C. Hope Johnson, London editor of *The Journal of Commerce*, the subject being, "Early Steamers of the Clyde." This will be illustrated with lantern slides. The Model Maker's Night is on March 8th. The second anniversary meeting was held on board the *Wellington*, when the Master Mariner's film of "The Peking at Sea" was shown to a large audience. The commentary was by Commander C. H. Williams, R.d., R.N.R. On February 8th, G. W. Munro gave a very interesting lecture on East Indiamen.

SOUTHEAST MODEL POWER BOAT CLUB

At the annual general meeting held in January it was decided that a race officer be appointed to take complete charge of all regattas and matters relating to competitions. It was also decided that a workshop be acquired for the general use of members. Officers were elected as follows:—

Chairman, J. Scott; secretary, J. L. Harrison; treasurer, H. Brown; race officer, D. Greenhop.
Press officer: F. G. MEARS, 5, Linden Court, Leigh-on-Sea, Essex.

THE SOCIETY FOR NAUTICAL RESEARCH

The special spring lecture for model makers will be given at the National Maritime Museum on Saturday, March 10th, at 3 p.m., by Commander Alan Villiers, his subject being "The Last Days of Sail." The lecture will be illustrated by coloured films, and will be of great interest and value for model makers. Friends, as well as members, are invited.

ABERDEEN MODEL ENGINEERING SOCIETY

The Aberdeen Model Engineering Society held their annual exhibition in the Music Hall, Aberdeen, during January. As might be expected in a shipbuilding centre like Aberdeen, ship models were greatly in evidence, and some very creditable models of square riggers were to be seen. The models were judged by Dr. A. C. West director of Robert Gordon's Technical College, and Mr. R. Cunningham, head of the Aberdeen Pre-apprenticeship School. In the marine section the first prize was awarded to Mr. N. W. Wood for the model of H.M.S. *Victory* and the second to Mr. D. McLeod for the model of a motor yacht. Mr. Wood's *Victory* model also won the championship cup for the best exhibit of the show.

INVERNESS AND DISTRICT SOCIETY OF MODEL ENGINEERS

This society has recently been formed. It includes amongst its members a considerable number who are interested in model yachts, ships and power boats, and there is a good prospect that the Town Council of Inverness will provide a model boating pond. All interested are invited to communicate with the Hon. Secretary, J. KENNEDY, 30, Midmills Road, Inverness.

PAIGNTON AND DISTRICT MODEL YACHT CLUB

Paignton and District Model Yacht Club's annual meeting on Saturday confirmed the dates of the following events: The marbled head class on March 11th, the 36-in. restricted class on March 17th, and 10-raters on October 20th and 21st. These will be open events.

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Motor	33 in. ...	10/9	" "
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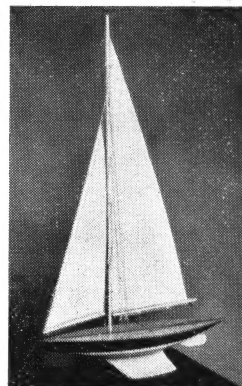
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